



Implementing UK Wind Energy: Lessons from Environmental Psychology

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The United Kingdom has set itself a bold target of producing 15% of its energy consumption from renewables by 2020 [1]. This rapid transition in electricity production will require the mass rollout of wind energy across the country. Deployment, as it stands, is significantly below the estimated electricity production potential for wind energy in the UK, which has the greatest potential in Europe – 114TWh/annum as compared to Spain's 86TWh/annum [2]. However, from 2012 Q3 to 2013 Q2 onshore and offshore wind energy combined produced only 23.8 TWh [3]. This number is low compared to our European neighbours [2]. But what are the barriers that prevent the UK from fulfilling its wind generation potential? One of the key struggles that wind farm developers face is local opposition to planning proposals [4], which may seem surprising since the British public generally has a positive opinion of renewable energy, including wind power [2].

There is a growing body of literature applying social and psychological models to explain the entrenched opposition to wind farm developments. By exploring two of the characteristics of local opposition – social influence and place attachment – we can help inform future policy on energy and planning matters.

Social Influence

The term NIMBY (not in my backyard) is often thrown around to describe those who approve of renewables in general, but protest loudly when a development is considered near their home. The term implies that opposition is a selfish, individualistic action and does not take into account the range of factors that influence a person's behaviour. However, there is also some evidence that acting in opposition to a wind farm development is more strongly influenced by other members of a community than by personal belief or sentiment.

Recently, a paper exploring indicators of opposition used the theory of planned behaviour (TPB) to assess whether attitudes, subjective norms, behavioural control or previous behaviour was more likely to predict planned opposition [5]. It found that the strongest indicators of intent were actually subjective norms – the opinion of influential others in the subject's social group – and past behaviour [5]. It's worth noting that this conclusion was based on a study conducted in Australia, and there appear to be significant differences in attitudes between countries [2]. Backing this theory in the UK, however, is Devine-Wright, who notes that attitudes to wind are social and, therefore, mutable [4].

If it is the case that attitudes are subject to change, then those members of the community who have significant sway over the planning application process

should be targeted early in the development process [5]. Many developers already target local councillors, community leaders and planning officers with strategic communication about the development and its potential benefits, but still around 60% of local councils reject wind farm proposals in England and Wales [2]. This could be due to a number of factors; most likely, the educational information provided by developers fails to influence key social leaders, and targeting this select group is insufficient. It is possible that the communication between developers and key influencers in the community lacks trust. Certainly, the planning process can seem unfair to those members of the community who feel their voice is not heard, and without trust, they may be suspicious of information from developers.

Place Attachment

Although visual impact is generally regarded as the main motivator of negative attitudes to development, Devine-Wright proposed that an emotional attachment to a place can be a strong influence either positively or negatively, depending on the perception of the technological development [2][4]. One approach to harnessing this attachment might be, once again, to emphasise education on renewable technologies, but I would argue that the Department of Energy and Climate Change (DECC) would better spend their money by taking advantage of the community aspect of place attachment.

There is evidence that community-owned energy projects have a greater success in the planning process [4]. In cases where communities partner with corporate energy companies, a wind farm development may be perceived as still belonging to the community and attachment to the place may function positively. It increases the local investment in the project so that the land still feels like part of the community. This approach is likely to increase trust between the developer and the community and lend credibility to communication between the developer and key influencers.

The UK needs to encourage investment in community-corporate partnerships for wind projects. DECC has already recognised the important role that community-led schemes will need to play in the UK, and have made information on Community Energy available along with a recent (June-August 2013) call for evidence on the subject. There are also a number of financial support mechanisms for community energy, including a Rural Community Energy Fund of £15m [6]. However, the large amount of capacity that the Government would like to see commissioned in the next seven years requires a stronger commitment. It requires the Government to include programmes and financial mechanisms, such as tax breaks, that encourage the Big 6 energy companies to

partner with communities in a meaningful way for large-scale projects, so that communities feel invested in the future of the turbines popping up around them.

The current opposition to wind farm developments at the local level in the UK is one of the greatest obstacles to rolling out wind energy at the scale needed to hit our 2020 renewables target. Luckily, recent literature has focused on how to recognise and influence oppositional behaviour. There is now significant evidence that social attitudes and place attachment play a larger role in determining opposition than education and landscape concerns. Investing in community-led energy projects tackles both of these influences, and it is encouraging that DECC is making moves in that direction, but further programmes and incentives need to encourage large companies to partner with communities if 15% renewable generation by 2020 is to be achieved.

References

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About the Author

Victoria is an MPhil student in the Technology Program at the Judge Business School at Cambridge University. She completed her bachelor degree in history at the University of Chicago before moving to London, where she worked with John Leech MP and at Quatro Public Relations. Other than her coursework, Victoria enjoys keeping up with the latest archaeological research and archery.